

Please amend claim 9 as follows.

9. (Amended) The process as claimed in Claim 8, further comprising the step of cutting the substrate strip according to cutting tracks defined by the cutting marks parallel to the longitudinal [axial] axis.

REMARKS

Applicants have amended claims 8 and 9 taking into consideration the outstanding Official Action. The term "axial" has been amended to read "axis" to more clearly define the invention and it is believed that this amendment clarifies claims 8. Applicants most respectfully submit that claims 8 and 9 clearly and particularly point out the claimed invention. Accordingly, it is most respectfully requested that the rejection under 35 U.S.C. 112, second paragraph, be withdrawn.

The rejection of claims 7-12 under 35 U.S.C. 102(e) as being anticipated by Neu has been carefully considered but is most respectfully traversed. In this regard, the Examiner's Attention is most respectfully directed to MPEP § 2131 which states that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. Applicants most respectfully submit that the rejection does not meet this standard.

Applicants most respectfully submit that Neu does not teach any alignment marks and cutting marks disposed around each individual substrate area on the substrate strip. In fact, the elements 64 and 65 in Fig. 4 asserted by the Examiner are directed to blade guide grooves (see col. 5, lines 39-40) and are provided on the upper carrier plate or pallet 62, instead of strip 2; the elements 47 in Fig. 4 asserted by the Examiner are directed to blade grooves (see col. 5, line 12) and are provided on the support table 46, instead of strip 2. Neu also fails to teach the cutting tracks. In fact, the elements 58 in Figs. 5 and 13 asserted by the Examiner are directed to blade guide (see col. 6, line 53). Evidently, the Examiner fails to fully understand the features and the Neu reference and the present invention and the distinct differences therebetween.

The Neu reference teaches an apparatus for separating and trimming of the circuit devices comprises a pallet including pneumatic means engagable with the encapsulated products for releasably holding one or more carrier strips. A cutting means at a first station having a reciprocatable frame comprises a plurality of rotating circular cutter blades, each having circumferentially spaced cutting teeth. The first reciprocatable frame receives the carrier for movement in a first path so that the teeth project through the plane of each carrier strip supported on the pallet to thereby effect a separation of the circuit devices from each other. Means are provided for limiting the projection of the cutter blades so that only the teeth, as opposed to the blade side edges, extend into the strip material. As the teeth rotate, each tooth draws air into the cut, thereby preventing the generation of heat in an amount liable to damage the delicate circuit devices. The invention further comprises cutting means at a second station having a second reciprocatable frame for moving the carier in a second path preferably parallel to the first to effect the trimming of the strip material from the circuit devices along lines which are extended transversely of the cut by the cutters in the first path. Means between the first and second stations for rotating the carrier through 90 degree prior to effecting the second cut is also preferably provided (see col. 2, lines 19-43).

The claimed invention relates to a process for sawing a substrate strip having a plurality of substrate areas by a saw machine. According to the process of the present invention, a plurality of alignment marks and cutting marks are disposed around each individual substrate area on the substrate strip, and the saw machine are positioned with respect to each individual substrate area in accordance with the alignment marks therearound. According to the preferred embodiment, the substrate strip 100 has a longitudinal axial and a lateral axial and the sbustrate areas 110 are disposed along the longitudinal axial, the saw machine is positioned with respect to the first substrate area 110 according to the alignment marks 111 along the longitudinal axial from the left and cuts the substrate strip 100 according to cutting tracks 101 defined by the cutting marks 112 parallel to the lateral axial. Then, the saw machine is positioned with respect to the second substrate area 110 from the left and then cuts the substrate strip 100. After all

substrate areas 110 are cut in the lateral direction of the substrate strip 100, the saw machine cuts the substrate strip 100 along the longitudinal axial thereof according to cutting tracks 101 defined by the cutting marks 112 parallel to the longitudinal axial. Therefore, the cutting error resulted from each substrate area 110 will not accumulate to the subsequent substrate areas in the substrate strip 100, thereby ensuring the cutting accuracy for the package substrate.

Evidently, the Neu reference fails to teach or suggest the features that the alignment marks and cutting marks are disposed around each individual substrate area on the substrate strip, and the saw machine are positioned with respect to each individual substrate area in accordance with the alignment marks therearound. Each individual substrate area on the substrate strip is sawed by the saw machine respectively according to cutting tracks defined by the cutting marks. Therefore, the Neu reference does not teach the solution to preventing the cutting error for each individual substrate area from accumulating to the subsequent substrate areas in the substrate strip. The present invention defined in the amended claims is believed patentably distinguishable over the Neu reference. Accordingly, it is most respectfully requested that this rejection be withdrawn.

In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,
BACON & THOMAS, PLLC

By: 
Richard E. Fichter
Registration No. 26,382

625 Slaters Lane, 4th Fl.
Alexandria, Virginia 22314
Phone: (703) 683-0500
Facsimile: (703) 683-1080

REF:kdd
A02.wpd

January 27, 2001